IN THE CLAIMS:

Please amend Claims 18-29 and 31-32 as shown below:

Subst. C1

18. (Amended) A fiber optic amplifier [system], comprising:

a waveguide [length of fiber] comprised of a material which will emit light in response to pumping [lase];

a source of signals comprising light at a [lasing] frequency of said emitted light [material which will lase];

a source of light for pumping said material [which will lase]; and

[an optical fiber coupled at a first end to an end of said fiber; and]

means for coupling both said signals and said light for pumping into an end of said waveguide [optical fiber].

2 19. (Amended) A fiber optic amplifier [system] as defined in Claim 18 in which said means for coupling comprises an optical coupler.

3 20. (Amended) A fiber optic amplifier [system] as defined in Claim 19, wherein said optical coupler comprises a single-mode optical coupler.

4 21. (Amended) A fiber optic amplifier [system] as defined in Claim 19 in which said optical coupler utilizes evanescent field coupling.

5 22. (Amended) A fiber optic amplifier [system] as defined in Claim 19 in which said optical coupler provides different coupling coefficients for said signals and said light for pumping.

6 23. (Amended) A fiber optic amplifier [system] as defined in Claim 22 in which said optical coupler has a coupling efficiency

which is wavelength dependent and in which said signals and said light for pumping are at different wavelengths, yielding different coupling efficiencies for said signals and said light for pumping.

Subst. C2 24. (Amended) A fiber optic amplifier, comprising:

a fiber optic coupler including a pair of optical fibers juxtaposed to provide coupling of light at a first frequency between said fibers and to prohibit coupling of light at a second frequency between said fibers;

a source of pumping illumination coupled to a first end of one of said pair of fibers, said pumping illumination comprising light having [being at] said first frequency;

B1 cont

a source of a signal to be amplified, coupled to a first end of the other of said pair of fibers, said signal to be amplified comprising light having [being at] said second frequency; and

a waveguide [laser fiber] formed of material which will possess a laser transition at said second [the] frequency of said signal to be amplified if said material is pumped with said pumping illumination, said waveguide [laser fiber] coupled at one end to a second end of said other of said pair of fibers.

B2 25. (Amended) A fiber optic amplifier [system] as defined in Claim 24 in which said fiber optic coupler has an effective interaction length at the juxtaposition of said optical fibers which is an even multiple of the coupling length of said fibers at said juxtaposition at a first [the] wavelength corresponding to [of] one of said first and second frequencies [signals to be

amplified and said pumping illumination] and an odd multiple of the coupling length of said fibers at said juxtaposition at a second [the] wavelength corresponding to [of] the other of said first and second frequencies [pumping illumination and said signals to be amplified].

9 9/1 26. (Amended) A fiber optic amplifier [system] as defined in Claim 25, wherein said pair of optical fibers are laterally offset from one another to tune said coupler to provide said odd and even multiples [the wavelength of said signals to be amplified and said pumping illumination].

10 9/1 27. (Amended) A fiber optic amplifier [system] as defined in Claim 26, wherein said pair of optical fibers are arcuate and wherein the radius of said arcuate optical fibers is selected in accordance with the [wavelength] difference between said first and second wavelengths [pumping illumination and said signals to be amplified].

B 1 cont.

Subst. C3 28. (Amended) A method of amplifying a light signal carried by an optical fiber, comprising the steps of:

combining said light signal and pumping illumination on a single optical waveguide [fiber]; and

coupling said combined light signal and pumping illumination from said single optical waveguide [fiber] to one end of a waveguide [fiber] comprised of a material which will emit stimulated radiation at a wavelength [the frequency] of said light signal if pumped with said pumping illumination.

29. (Amended) A method of amplifying a light signal as defined in Claim 28, wherein said combining step comprises

multiplexing said wavelength of said light signal and a wavelength of said pumping illumination in an optical coupler which is optically connected to said single optical waveguide [fiber] and which has a coupling efficiency which is wavelength dependent.

31. (Amended) A method of amplifying a light signal as defined in Claim 28, wherein the step of coupling comprises coupling said combined light signal and pumping illumination to a [laser fiber] having a diameter which is less than the absorption length of said laser [crystal] fiber at said [the] wavelength of said pumping illumination.

32. (Amended) A fiber optic apparatus, comprising:

a source of pump light comprising light having a first [spectrum of] wavelength[s];

an optical waveguide [fiber] comprising a laser material, said optical waveguide [fiber] emitting light at a second [spectrum of] wavelength in response to pumping at said first [spectrum of] wavelength[s]; and

an optical coupler having an input port and an output port, said input port coupled to said pump source to receive light from said pump source, said output port coupled to said optical waveguide [fiber] for pumping said laser material, said coupler being highly wavelength discriminating so as to selectively couple one of said first and second [spectrum of] wavelengths without substantial coupling of the other of said first and second [spectrum of] wavelengths.